THE RESOURCE SHARER

JULY 1974 RSTS-11 SPECIAL INTEREST GROUP NEWSLETTER VOL. 1 NO. 2

FROM THE EDITOR

WELL I'M FINALLY GETTING NEWSLETTER #2 OUT THE DOOR. IT CONTAINS INFORMATION ABOUT THE SPRING DECUS MEETING AND THE ACTIVITY OF OUR NOW ACTIVE SIG. I WANT TO THANK ALL OF YOU THAT HAVE CONTRIBUTED TIME AND EFFORT TO THE SIG. IN PARTICULAR, I WOULD LIKE TO THANK BOB JONES FOR HIS HELP WITH THIS NEWSLETTER. BOB IS A REAL DOER.

THE SIG HAD WHAT I FEEL WAS ONE OF THE MOST USEFUL AND ENTHUSTATIC SESSIONS OF THE MEETING. AROUND 80 RSTS USERS WERE FINALLY ABLE TO GET TOGETHER AND COMPARE NOTES, ATR GRIPES, AND DEFINE GOALS FOR THE SIG. THE INTEREST,DIALOG, AND IDEAS FROM THE 7 HOURS WE MET WERE STAGGERING. THE SIG IS DEFINATELY OFF THE GROUND.

IF YOU ARE A RSTS/E USER, I HAVE SOME GOOD NEWS AND SOME BAD NEWS FOR YOU. FIRST THE GOOD NEWS IS THAT RSTS 5B IS COMING IN AUGUST (SEE THE MEMO FROM GERRY HORNICK IN THIS NEWSLETTER). IT LOOKS GOOD, AND IS RUNNING IN-HOUSE. NOW THE BAD NEWS, YOU NEED TO INCREASE YOUR BUDGET BY $1200 PER YEAR. DEC ANNOUNCED SOFTWARE SUPPORT FEATURES FOR RSTS/E. THEY WILL INCLUDE SEVERAL LEVELS OF SUPPORT, BUT TO RECEIVE GUARENTEED YEARLY NEW RELEASES OF RSTS/E YOU MUST PAY FOR THE FULL ($1200) SOFTWARE SUPPORT.

FOR MY FELLOW RSTS 4A USERS, I'VE GOT ONLY BAD NEWS. THE WORD IS THAT REGULAR RSTS WILL GET ONE MORE RELEASE IN DECEMBER, BUT IT WILL JUST BE CLEANNED UP VERSION OF 4A. DEC HAS NO PLANS AT PRESENT TO ADD ANY OF THE NICE RSTS/E FEATURES TO RSTS 4A. FINALLY THOSE OF YOU WHO ARE USING THE SPECIAL SCHEDULER FOR 4A THAT HAS BEEN PASSED AROUND, WILL BE SADDENED TO HEAR THAT IT WILL NOT BE PART OF THE DECEMBER RELEASE.

ROBERT BRANTON

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SIG NEWS

SEVERAL SIG PROJECTS WERE STARTED IN BOSTON. ANYONE INTERESTED IN BEING INVOLVED WITH ANY OF THEM OR HAVING ANY COMMENTS ABOUT THEM PLEASE GET IN TOUCH WITH THE PEOPLE LISTED.

1. BASIC PROGRAMMING STANDARDS - A GREAT DEAL OF DISCUSSION AT THE DECUS MEETING WAS SPENT ON THE NEED FOR STANDARDS IF USERS PLANNED TO EXCHANGED PROGRAMS. MERRILL LIKES IS PRESENTLY WRITING A SET OF STANDARDS TO SERVE AS A STARTING POINT. ANY SUGGESTIONS SHOULD BE SENT TO:

MERRILL E. LIKES
DATA PROCESSING CENTER
CENTRAL STATE UNIVERSITY
EDMOND,OK
(405) 341-2980 EX 2321

2. RECORD I/O FORMAT STANDARDIZATION - DISCUSSED DURING THE SIG SESSION WAS ON THE NEED TO ESTABLISH A STANDARD RECORD I/O FORMAT TO EASE COMMUNICATION WITH DEC PROGRAMS AND OTHER USER PROGRAMS. ROSS MILLER HAS DEVELOPED STANDARDS FOR HIS SHOP AND HAS VOLUNTEERED TO WRITE UP SOME STANDARDS TO SERVE AS A STARTING POINT, ANYONE WISHING TO BE INVOLVED CONTACT:

ROSS MILLER
AMERICAN SIGN & INDICATOR CORP.
P.O. DRAWER 2727
SPOKANE,WASH. 99220
(509) 535-4101

3. REGIONAL WORKSHOPS - THE POSSIBLITY OF HAVING REGIONAL SIG WORKSHOPS TO WRITE PROGRAMS OF COMMON NEED OR TO DEVELOP STANDARDS WAS DISCUSSED AT THE SIG MEETING, ANYONE WITH AN IDEA FOR A WORKSHOP OR INTERESTED IN PARTICIPATING IN ONE PLEASE CONTACT:

JOHN T. RASTED
JR ASSOCIATES
58 RASTED LANE
MERIDEN,CONN. 06450
(203) 634-1632

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RSTS/E INTERNALS MANUAL

FOR THOSE OF YOU WHO ARE FLOUNDERING AROUND THE INTERNALS OF RSTS/E AND DAILY CURSING DEC FOR NOT PROVIDING AT LEAST A MARGINAL INTERNALS MANUAL, THERE IS HOPE. WE AT CHRYSLER DECIDED TO TAKE MATTERS INTO OUT OWN HANDS AND WRITE OUT OWN INTERNALS MANUAL. WE ADMIT THAT IT IS NEITHER COMPLETE NOR ENTIRELY ACCURATE, BUT IT IS A START. ALONG WITH IT, WE WROTE A SERIES OF PROGRAMS TO ACCESS THE INTERNAL TABLES AND PRINT OUT THEIR CONTENTS.

BOTH THE DOCUMENT AND THE PROGRAMS ARE AVAILABLE FOR FREE IF YOU WILL MAIL A 9 TRACK MAG TAPE, 800 BPI (STANDARD TU-10 TYPE TAPE) TO ME AT:

CHRYSLER CORPORATION
11111 FRENCH ROAD
DETROIT, MICHIGAN 48234

PLEASE ENCLOSE A STAMPED, SELF ADDRESS RETURN MAILER FOR YOUR TAPE. WE DO NOT HAVE DECTAPE AT THIS TIME, BUT DO EXPECT ITS ARRIVAL SHORTLY AFTER DEC DECIDES TO SHIP IT. NO FURTHER COMMENT IS NECESSARY ON DEC'S EFFICIENCY IN THESE MATTERS, AS WE ALL KNOW THAT IT IS UNHEALTHY TO HOLD ONE'S BREATH.

IF YOU WANT SIMPLY A LISTING OF THE DOCUMENT, OR YOU WANT IT COPIED TO AN RK05 PACK, THAT CAN BE ARRANGED TOO.

PLEASE REMEMBER TO SEND A STAMPED, SELF ADDRESS RETURN MAILER, BECAUSE I AM TERRIBLY LAZY AND DON'T EVEN HAVE THE MONEY TO MAIL A LETTER TO MY GIRL FRIEND MUCH LESS A TAPE TO YOU.

BOB JONES
TECHNICAL PROCESS SYSTEMS PLANNING
CHRYSLER CORPORATION

FEATURES OF RSTS/E VERSION 5B

***THE FOLLOWING IS A COPY OF A MEMO GERRY HORICK, RSTS PRODUCT MANAGER, SENT ME ABOUT RSTS/E 5B:

THE SECOND RELEASE OF RSTS/E IS EXPECTED TO BE AVAILABLE BY THE END OF AUGUST. FIELD TEST BEGAN IN MAY. ALL OF THE SOFTWARE ALREADY HAS BEEN RUNNING IN-HOUSE. THE FOLLOWING HAVE BEEN ADDED IN THIS NEW RELEASE:

1. NEW HARDWARE SUPPORTED

A. RS03/RS04 DISKS FOR SWAPPING - FOUR TIMES THE TRANSFER RATE OF PREVIOUS SWAPPING DISKS (NOTE: THERE MUST BE ANOTHER DISK FOR USE AS THE SYSTEM DISK).
B. LP11-R 1200 LINE PER MINUTE LINE PRINTER - FULL RATED SPEED ON LIGHTLY LOADED SYSTEM.
C. 2741 SELECTRIC TYPEWRITER TERMINALS - BCD, EBCD, OR CORRESPONDENCE CODE - GIVES 132 COLUMNS, UPPER AND LOWER CASE TYPE BALL.
D. DL11C/D INDIVIDUAL LINE TERMINAL INTERFACES - COMPLETES SUPPORT FOR THE ENTIRE DL11 LINE.
E. CD11 1000 CARD PER MINUTE CARD READER - THIS HAS BEEN SUPPORTED ON RSTS/E SINCE THE FIRST RELEASE BUT WAS NOT WELL PUBLICIZED.

2. NEW PROGRAMMING FEATURES

A. SINGLE PROGRAM MULTIPLE TERMINAL CONTROL - PERMITS A SINGLE PROGRAM TO RECEIVE FROM AND SEND TO ANY NUMBER OF TERMINALS (EVEN ALL OF THEM) INCLUDING CHECKING WHETHER ANY REPONSE IS AVAILABLE OR WAITING FOR INPUT FROM ANY OF THE CONTROLLED TERMINALS - IDEAL FOR MANY DATA ENTRY OR INVENTORY CONTRUL APPLICATIONS.
B. SEND/RECEIVE BETWEEN JOBS - ENABLES A JOB TO SEND A SMALL AMOUNT OF DATA TO ANOTHER JOB.
C. PSEUDO-KEYBOARDS - CAN BE USED TO RUN AN INTERACTIVE JOB WITHOUT THE INVOLVEMENT OF AN ACTUAL TERMINAL.
D. CVT$$ FUNCTION - ASSISTS IN COMMAND AND INPUT STRING SCANNING - INCLUDES CONVERSIONS SUCH AS LOWER CASE TO UPPER CASE, MULTIPLE BLANKS AND TABS TO SINGLE SPACE, REMOVE ALL BLANKS, REMOVE TERMINATORS, ETC.

3. EASE OF USE FEATURES.

A. LOGICAL DEVICE ASSIGNMENTS - ARBITRARY DEVICE NAMES CAN BE ASSIGNED BY USERS - FURTHER AIDS DEVICE INDEPENDENCE.
B. MULTIPLE PROGRAM (OR FILE) LIBRARIES - TWO EXTRA SYSTEM LIBRARY ACCOUNTS ARE DEFINABLE, GROUP LIBRARY FOR EACH PROJECT NUMBER, ONE LIBRARY ACCOUNT NUMBER DYNAMICALLY ASSIGNABLE BY USER.
C USER DEFINED COMMAND LANGUAGE - COMMANDS CAN BE ADDED, IMPLEMENTED BY SYSTEM LIBRARY PROGRAMS (F.G., EDIT, MOUNT, COPY, QUE, ...).

4. EASE OF USE UTILITIES.

A. LINE PRINTER SPOOLER - USERS QUEUE FILES FOR PRINTING WITHOUT WAITING FOR PRINTER AVAILABILITY, PRINTER KEPT RUNNING CONTINUALLY - MULTIPLE COPIES POSSIBLE, OTHER FEATURES (PROGRAMS CAN CHAIN TO QUEUING PROGRAM AS WELL).
B. DEC STANDARD BATCH (LOW LEVEL) - ABILITY TO RUN RSTS/E JOBS IN BATCH MODE FROM CARD READER OR FILE.
C. RUNOFF DOCUMENT PREPARATION SYSTEM - UPWARD COMPATIBLE SUBSET OF THE NEW PDP-10 RUNOFF - INCLUDES LOWER AND UPPER CASE, JUSTIFICATION TO RIGHT MARGIN, PAGING WITH HEADERS.

5. PERFORMANCE/OPERATION IMPROVEMENTS

A. IMPROVED BUFFER MANAGEMENT - UTILIZES MORE OF THE AVAILABLE BUFFER SPACE TO LESSEN THE SWAPPING LOAD.
B. BOOSTED INTERFACE JOB PRIORITY - SPEEDS RESPONSE TO CARRIAGE RETURNS TYPED TO TERMINALS.
C. MULTIPLE SWAP FILES - ALLOWS ACTIVE JOBS TO BE SWAPPED ON A SWAPPING DISK, INACTIVE ONES ON THE SYSTEM DISK -SWAPPING DISK NO LONGER HAS TO BE BIG ENOUGH FOR ALL JOBS.
D. BETTER MAGTAPE HANDLING - NO REWINDS UNLESS NECESSARY OR EXPLICITLY REQUESTED.
E. DECIMAL ARITHMETIC - SCALED, PRECISE FOUR-WORD MATH PACKAGE WITH NUMBER OF PRECISE DECIMAL PLACES UNDER CONTROL OF INDIVIDUAL USERS.

6. NEW DISTRIBUTION

A. RK05 ONLY DISTRIBUTION - PERMITS SMALL CONFIGURATION WITH RK05 DISK CARTRIDGE DRIVES AND NO MAGNETIC TAPES.

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QUESTIONNAIRE RESULTS

SEVERAL THINGS NEED TO BE SAID ABOUT THE QUESTIONNAIRE BEFORE ANALYZING THE RESULTS. FIRST IT WAS DRAWN UP IN JANUARY, SO SOME OF THE FEATURES LISTED IN QUESTIONS HAVE ALREADY BEEN IMPLEMENTED OR WILL BE IN RELEASE 5B OF RSTS/E. SECOND, SINCE HALF OF THE RSTS INSTALLATIONS RUN RSTS VERSION 4 ,SOME OF THE QUESTIONS WERE GEARED TO RSTS 4A.
I HAVE RECEIVED 61 RESPONSES TO THE QUESTIONNAIRE AND I HAVE ALREADY INFORMED GERRY HORNIK THAT IT IS WORTH $10,000 FOR HIM TO ADD ALL THE FEATURES TO RSTS BASED ON QUESTION 18. THE RESULTS ARE ON THE NEXT TWO PAGES. THE FIRST IS A QUESTIONNAIRE RESPONSE TALLY PAGE AND THE SECOND IS A LIST OF SOME OF THE ADDITIONAL FEATURES THAT WERE SENT IN.

RESULTS: 61 RESPONSES

RSTS-11 QUESTIONNATRE

NR	NO	YES	<100	<500	>500	
12	10	13	8	9	9	1. ADDITIONAL ACCESS METHOD SUPPORT AT MONITOR SUCH AS ISAM(FIXBLK AND VARBLK).
10	5	20	15	6	5	2. IMPLEMENTATION OF I/O SPOOLING FACILITY AT MONITOR LEVEL.
3	11	6	1	4	36	3. MULTI-LANGUAGE SUPPORT, TO INCLUDE COBOL AND FORTRAN.
5	6	15	10	12	13	4. THE CAPABILITY OF WRITING ASSEMBLY LEVEL ROUTINES UNDER THE MONITOR AND THE ABILITY TO CALL THEM FROM BASIC PROGRAMS.
7	9	14	13	11	7	5. DECIMAL ARITHMETIC CAPABILITY COEXISTANT WITH FLOATING POINT.
5	1	16	15	11	13	6. PROGRAM OVERLAY CAPABILITY WHERE FILES ARE NOT CLOSED AND VARIABLES ARE KEPT INTACT.
21	11	14	5	6	4	7. LARGER PROGRAM SPACE IMPLEMENTATION OF I&D SPACE ON 11/45'S.
7	7	18	7	9	13	8. A BACKGROUND BATCH CAPABILITY UNDER RSTS CONSISTANT WITH DEC STANDARDS.
8	10	18	13	6	6	9. LONGER VARIABLE NAMES OR A PRE-COMPILER THAT WILL MAINTAIN SOURCE IN LONG FORM, BUT WILL TRANSLATE TO AN ARBITARY SHORT FORM FOR THAT COMPILATION.
8	6	32	11	3	1	10. CROSS REFERENCE CAPABILITY FOR BASIC PROGRAM LISTINGS.
9	13	25	11	1	2	11. MULTIPLE BLOCK LOCK WITH RECORD I/O UPDATE.
5	10	39	5	2	0	12. AN IMPROVED EXPLANATION OF RECORD I/O IN THE BASIC-PLUS MANUAL, WITH MORE EXAMPLES.
3	7	44	5	2	0	13. AN EXPANDED INDEX FOR THE BASIC-PLUS MANUAL FACILITATE ACCESS TO INDIVIDUAL ITEMS.
15	11	17	15	2	1	14. ON-LINE PERIPHERAL DIAGNOSTICS UNDER RSTS.
15	17	18	8	2	1	15. PROVIDE NON-FILE STRUCTURAL MAGTAPE HANDLERS.
12	14	21	8	5	1	16. PROVIDE ASCII CONTROL CHARACTER SUPPORT FOR THE LINE PRINTER.
12	8	17	14	10	0	17. A SOFTWARE SUPPORT SUBSCRIPTION SERVICE FOR ON GOING SOFTWARE DEVELOPMENT.
11	4	21	4	0	21	18. A HERO BADGE FOR GERALD HORNIK IF HE MANAGES TO PULL IT OFF.

*NR= NO RESPONSE

*** ADDITIONAL RSTS FEATURES SUGGESTED BY USERS

1. INCLUDE RPG AS A RSTS SUPPORTED LANGUAGE TO ALLOW SYSTEM 3 TYPE PROCESSING IN A TIMESHARING ENVIRONMENT.

2. CALL STATEMENT WITH ARGUMENTS IN BASIC-PLUS.

3. BIT STRING HANDLING IN BASIC-PLUS.

4. DOUBLE PRECISION CO-EXISTANT WITH SINGLE PRECISION IN BASIC.

5. DOCUMENTED SUGGESTIONS FROM DEC ON HOW A USER CAN BEST USE HIS CONFIGURATION OF DEC EQUIPMENT BEFORE HE BUILDS HIS SOFTWARE SYSTEM.

6. SOME TYPE OF LOGICAL RECORD I/O.

7. NEGATIVE "INSTR( )" SUCH THAT IF THE STARTING POSITION IS GIVEN AS A NEGATIVE NUMBER THE SEARCH WILL PROCEED IN A NEGATIVE DIRECTION.

8. INCLUDE THE CAPABILITY FOR STRUCTURED PROGRAMMING.

9. PUT THE "POKE" BACK INTO RSTS/E.

10. INCLUDE THE ABILITY TO EDIT AND MODIFY A LINE OF BASIC TEXT AT COMMAND LEVEL WITHOUT RETYPING THE LINE.

11. PUT A MODULO FUNCTION IN BASIC-PLUS.

12. ALLOW SUBRECORDS IN RECORD I/O SMALLER THAN 512 CHARACTERS.

13. INCLUDE A PROGRAM TO LIST VARIABLES IN SEQUENCE AS PART OF THE MONITOR.

14. PROVIDE DETAILED INFORMATION ON ADDING A NON-SUPPORTED DEVICE DRIVER TO RSTS.

15. PROVIDE FACILITIES TO KEEP THE SYSTEM MORE SECURE FROM A SOMETIMES "HOSTILE" ENVIRONMENT, WHERE A STNGLE USER CAN ASSIGN ALL THE SYSTEM RESOURCES.

16. INCLUDE DU-11 SUPPORT UNDER RSTS.

17. RELEASE RSTS "MACRO 11".

18. INCLUDE A SERVICE # COMMAND TO SPECIFY THE NUMBER OF LINES IN SERVICE REGARDLESS OF THE NUMBER OF LINES CONNECTED.

19. PROVIDE DETAILS OF THE PUSH-POP CODE OF THE RSTS RUNTIME SYSTEM.